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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,157	04/20/2005	Satoshi Sato	5077-000234/NP	8309
27572 7590 08/26/2008 HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303				
EXAMINER				
MARC, MC'DEUNEL				
ART UNIT		PAPER NUMBER		
3664				
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08/26/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/532,157

Applicant(s)

SATO ET AL.

Examiner

MCDIEUNEL MARC

Art Unit

3664

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-16, 20, 21 and 24-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-16, 20, 21 and 24-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 4/20/2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 3-16, 20-21 and 24-26 are pending, and claims 1-2, 17-19 and 22-23 have been cancelled.
2. The abstract of the disclosure is objected to because of the word “means”. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 3-16, 20-21 and 24-26 are rejected under 35 U.S.C. 102(b) as being anticipated by **Gräser** Technological Solutions to Autonomous Robot Control

As per claim 4, **Gräser** teaches an autonomous robot wherein said robot controlling means stops the handling job of said robot when it is found, on the basis of a determination result obtained by said handling right determining means, that said subject having issued the job instruction does not have a handling right of said article (see figs. 1 and section 2).

As per claims 4, 20, 24 and 25, **Gräser** teaches a system and an associated method of an autonomous robot that contains an article management system for managing articles in a given space (see fig. 1, wherein the giving space can anywhere), comprising: a robot for executing a handling job for an article (see fig. 1); robot controlling means for making said robot execute the handling job in accordance with a job instruction (see fig. 1, particularly the robot controller): sensing means for detecting a state of the space (see fig. 1, particularly the sensors): article identifying means for identifying (see fig. 1, particularly the camera), when an article is handled by a movable body, said handled article in response to a detection result obtained by said sensing means: article handling subject identifying means for identifying when an article is handled by a movable body, an article handling subject that handles said article in response to the detection result obtained by said sensing means (see fig. 1, particularly the arm and the camera); a database for storing information of handling rights set with respect to the articles (see fig. 5, wherein having “a computer program analyses the actions of a demonstration and reproduce the action by assigning known basic actions to the demonstration” has been shown clear evidence of a database for storing information); handling right determining means for determining, on the basis of said information stored in said database whether or not said article handling subject has a handling right of said article in response to an identification result about said article obtained by said article identifying means and an identification result about said article handling subject obtained by said article handling subject identifying means (see fig. 1 as whole); and handling right setting/changing means for setting and/or changing the handling rights and storing the handling rights in said database, wherein when said movable body that handles said article is said robot, said article handling subject identifying means identifies a subject having issued the job

instruction as said article handling subject that handles said article (see sections 1-8 and figs. 1-5).

As per claim 5, **Gräser** teaches an autonomous robot wherein said handling right setting/changing means sets and/or changes the handling rights on the basis of the detection result obtained by said sensing means (see section 5, wherein “The disturbances which will change the relative positions of the cameras with respect to the robot arm base. Calibration robust, visual control, a method published by Hager [HCM95] represent a basis for a possible solution. The basic idea is the position control based on the image information in both cameras. If the reference point at the gripper is at a specific target point in both images, the gripper is at the target position in 3D space. The target point normally is a significant point at an object, easily detectable by the image software.” being taken as setting/changing).

As per claim 6, **Gräser** teaches an autonomous robot wherein said database stores handling history information of the articles on the basis of the detection result obtained by said sensing means (see fig. 5 and section 7), and said handling right setting/changing means sets and/or changes the handling rights of the articles on the basis of said handling history information of the articles stored in said database (see sections 5, 7 and fig. 5, wherein the computer system being taken as means for keeping record/history).

As per claim 7, **Gräser** teaches an autonomous robot wherein said sensing means detects a position of an article present in the space, and said handling right setting/changing means sets and/or changes a handling right of said article in accordance with the position of said article detected by said sensing means.

As per claim 8, **Gräser** teaches an autonomous robot wherein when an article is contained in a container, said handling right setting/changing means makes a handling right of said article accord with a handling right of said container (see figs. 1, 7 and sections 5, 7 as noted above).

With respect to claim 8, **Gräser** handling right of said article in accordance with the temperature of said article detected by said sensing means being taken as a known feature; for instance, in section 4.) “several different sensor systems have been considered in the past” therefore, using a temperature sensor has been taken as design choice.

As per claims 9 and 10, **Gräser** teaches an autonomous robot wherein said sensing means detects shape change of an article, and said handling right setting/changing means sets and/or changes a handling right of said article in accordance with the shape change of said article detected by said sensing means; and in accordance with the weight of said article detected by said sensing means (see fig. 1, wherein each object has different shape and weight).

As per claim 12, **Gräser** teaches an autonomous robot wherein said sensing means detects a position of a movable body, and said handling right setting/changing means sets and/or changes a handling right of an article in accordance with a detection result obtained by said sensing means whether or not there is a movable body in the vicinity of said article (see fig. 1 as a whole).

As per claims 13 and 21, **Gräser** teaches an autonomous robot wherein said handling right setting/changing means sets and/or changes a handling right of an article when a given state is attained in the space (see fig. 1 as noted above).

As per claim 14, **Gräser** teaches an autonomous robot wherein said robot controlling means makes said robot automatically execute the handling job by issuing the job instruction on the basis of a state of the space and the handling rights set and/or changed by said handling right setting/changing means (see sections 1-3 and fig. 1).

As per claim 15, **Gräser** teaches an autonomous robot wherein said handling right setting/changing means sets a handling right of an article to a movable body and/or a movable body group consisting of a plurality of movable bodies (see fig. 4).

As per claim 16, **Gräser** teaches an autonomous robot wherein said handling right setting/changing means sets a handling right with respect to each article and/or each article group consisting of articles having the same attribute (see fig. 1, wherein all the article belongs to the kitchen/same attribute).

21. The server of claim 20, wherein said handling right setting/changing means sets and/or changes the handling rights in accordance with a state of the space.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MCDIEUNEL MARC whose telephone number is (571)272-6964. The examiner can normally be reached on 6:30-5:00 Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Khoi Tran can be reached on (571) 272-6919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/McDieunel Marc/
Examiner, Art Unit 3664

Thursday, August 14, 2008
/KHOI TRAN/
Supervisory Patent Examiner, Art Unit 3664